

LPDES PERMIT NO. LA0123927 (Agency Interest No. 155459)

LPDES Statement of Basis
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. Company/Facility Name:** Southern Ionics Incorporated
Baton Rouge North
1250 Neosho Avenue
Baton Rouge, Louisiana 70802
- II. Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Water Permits Division
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Date Prepared: May 7, 2008

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

IV. Permit Action/Status:

A. Reason For Permit Action:

Proposed initial issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2365/40 CFR 122.46.

In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes

Statement of Basis

Southern Ionics Incorporated/Baton Rouge North

LA0123927 / AI 155459

Page 2

only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX. Chapter 11) will not have dual references.

- B. LPDES permit: N/A
EPA has not retained enforcement authority.
- C. Application submittal date: Application submitted on March 14, 2008.

V. Facility Information:

- A. Location – 1202 Airline Highway, Baton Rouge, East Baton Rouge Parish (Latitude 30°30'24", Longitude 91°11'23").
- B. Applicant Activity -

According to the application, Southern Ionics Incorporated/Baton Rouge North, is an inorganic chemical manufacturing facility involved in the production of aluminum chloride solutions and sodium aluminate solutions. Southern Ionics Incorporated uses a neutralization tank for scrubber blowdown, cooling tower blowdown, softener regeneration wastewater, boiler blowdown, air compressor condensate, and miscellaneous wastewaters. A package treatment unit is operated for discharges of sanitary wastewater. Sampling will occur from each individual outfall prior to discharging into the Mississippi River by way of one effluent pipe that is also used by several other facilities.

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Inorganic Chemical Manufacturing

Reference

40 CFR 415, Subpart A*

40 CFR 415, Subpart R*

* Only pretreatment standards have been promulgated under Subpart A of the inorganic chemical manufacturing category. Subpart R guidelines are reserved. Therefore, technology limitations applied in the permit for Southern Ionics Incorporated are based upon best professional judgment.

Statement of Basis

Southern Ionics Incorporated/Baton Rouge North

LA0123927 / AI 155459

Page 3

- D. Fee Rate -
1. Fee Rating Facility Type: Minor
 2. Complexity Type: IV
 3. Wastewater Type: III
 4. SIC code: 2819

VI. Receiving Waters: Mississippi River (Outfalls 001, 002, and 003)

Mississippi River:

- A. River Basin: Mississippi River, Segment No.: 070301
- B. Designated Uses: primary contact recreation, secondary contact recreation, fish and wildlife propagation, and drinking water supply

VII. Outfall Information:Outfall 001

- A. Type of wastewater – scrubber blowdown, cooling tower blowdown, softener regeneration wastewater, boiler blowdown, air compressor condensate, and miscellaneous wastewaters (including but not limited to fire protection system test waters, de minimus laboratory wastewater, safety shower wastewater, and eye wash station wastewater).
- B. Location – At the point of discharge from the neutralization tank prior to combining with other waters (Latitude 30°30'25", Longitude 91°11'22").
- C. Treatment – Treatment of wastewater consists of:
- pH adjustment (scrubber water undergoes pH adjustment prior to mixing with other waters).
- D. Flow – 15,077 GPD
- E. Receiving waters – Mississippi River
- F. Basin and segment – Mississippi River Basin, Segment 070301

Outfall 002

- A. Type of wastewater – Hydrostatic test wastewater

Statement of Basis

Southern Ionics Incorporated/Baton Rouge North

LA0123927 / AI 155459

Page 4

- B. Location – At the point of discharge from the vessels being tested prior to combining with other waters
- C. Treatment – None
- D. Flow – Intermittent flow is variable
- E. Receiving waters – Mississippi River
- F. Basin and segment – Mississippi River Basin, Segment 070301

Outfall 003

- A. Type of wastewater – Treated sanitary wastewater.
- B. Location – at the point of discharge from the sanitary package treatment unit, prior to combining with other waters (Latitude 30°30'25", Longitude 90°11'20").
- C. Treatment – Treatment of wastewater consists of:
 - mixing
 - screening
 - activated sludge
 - disinfection
- D. Flow – Intermittent: 500 GPD
- E. Receiving waters – Mississippi River
- F. Basin and segment – Mississippi River Basin, Segment 070301

Statement of Basis
 Southern Ionics Incorporated/Baton Rouge North
 LA0123927 / AI 155459
 Page 5

VIII. Proposed Permit Limits and Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.

Outfall 001 – Treated scrubber blowdown, cooling tower blowdown, softener regeneration wastewater, boiler blowdown, air compressor condensate, and miscellaneous wastewaters (including but not limited to fire protection system test waters, de minimus laboratory wastewater, safety shower wastewater, and eye wash station wastewater).

Parameter	Proposed Permit Limitations		Monitoring Freq.
	Monthly Avg mg/L	Daily Max mg/L	
Flow	Report	Report	1/month
pH	6.0 s.u. (Min)	9.0 s.u. (Max)	1/month
TOC	---	50 mg/L	1/month
Oil & Grease	---	15 mg/L	1/month

EFFLUENT LIMITATIONS BASIS for Outfall 001:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

TOC and Oil & Grease: Limitations are based upon BPJ

pH: Requirements are based upon LAC 33:IX.1113.C.1.

Statement of Basis
 Southern Ionics Incorporated/Baton Rouge North
 LA0123927 / AI 155459
 Page 6

Outfall 002 – Hydrostatic test wastewater

Parameter	Proposed Permit Limits		Monitoring Frequency
	Monthly Avg	Daily Max	
Flow	Report	Report	Once per event
pH ^(*1)	6.0 s.u.(min)	9.0 s.u.(max)	Once per event
TSS ^{(*1)(*2)}	----	90 mg/L	Once per event
Oil & Grease ^(*1)	----	15 mg/L	Once per event
TOC ^(*1)	----	50 mg/L	Once per event
Benzene ^(*1)	----	50 µg/L	Once per event
Total BTEX ^(*1)	----	250 µg/L	Once per event
Total Lead ^(*1)	----	50 µg/L	Once per event

- (*1) Benzene, Total BTEX, and Total Lead shall be measured on discharges from pipe or vessel which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. Total Organic Carbon (TOC) shall be measured on discharges from pipelines, flowlines, piping, vessels, or tanks which have previously been in service – i.e., those which are not new. Accordingly, Flow, TSS, Oil & Grease and pH are the only testing requirements for new pipe or vessels.
- (*2) The background concentration of Total Suspended Solids (TSS) will be allowed in the discharge if the effluent is being returned to the same water source from which the intake water was obtained. In these cases, the permit limitations will be 90 mg/L plus the concentration of TSS in the intake water. The TSS concentration of the intake water shall be reported on the Discharge Monitoring Report (DMR) along with the concentration of TSS in the effluent.

Statement of Basis
 Southern Ionics Incorporated/Baton Rouge North
 LA0123927 / AI 155459
 Page 7

EFFLUENT LIMITATIONS BASIS for Outfall 002:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

TSS, Benzene, Oil & Grease, TOC, Total BTEX, Total Lead and pH: Limitations are applied by BPJ based upon the Hydrostatic Test Wastewater General Permit (LAG670000)

Outfall 003 – Treated Sanitary Wastewater

Parameter	Proposed Permit Limitations		Monitoring Freq.
	Monthly Avg	Weekly Avg	
Flow	Report	Report	1/6 months
pH	6.0 s.u. (Min)	9.0 s.u. (Max)	1/6 months
BOD mg/L	----	45	1/6 months
TSS mg/L	----	45	1/6 months
Fecal Coliform colonies/100 mL	----	400	1/6 months

EFFLUENT LIMITATIONS BASIS for Outfall 003:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

BOD, TSS, Fecal Coliform and pH: Limitations are applied by BPJ based upon LPDES Class I Sanitary General Permit (LAG530000)

D. MONITORING FREQUENCIES

Monitoring frequencies for all outfalls are based upon office practices for similar discharges and applicable referenced general permits.

Statement of Basis

Southern Ionics Incorporated/Baton Rouge North

LA0123927 / AI 155459

Page 8

IX. Compliance History/DMR Review:

No current enforcement history available. This is a proposed facility.

X. Endangered Species:

The receiving waterbody for Southern Ionics Incorporated is Subsegment 070301 of the Mississippi River Basin. Segment 070301 of the Mississippi River Basin has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as a threatened or endangered species. After reviewing the LPDES application, this Office determined that Southern Ionics Incorporated does not have the reasonable potential to discharge the substances of concern identified by the October 24, 2007 Implementation Strategy for the LDEQ and the U.S. Fish and Wildlife Service (USFWS) Memorandum of Understanding (MOU). Therefore, in accordance with the MOU, the draft permit for Southern Ionics Incorporated has not been submitted to the USFWS for review. LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XI. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XII. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharges described in the application.

XIII. Variances:

No requests for variances have been received by this Office.

XIV. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues

Statement of Basis

Southern Ionics Incorporated/Baton Rouge North

LA0123927 / AI 155459

Page 9

involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

A public notice will be published in a local newspaper of general circulation and in the Office of Environmental Services Public Notice Mailing List.

XV. TMDL Waterbodies:

Southern Ionics Incorporated/Baton Rouge North discharges treated scrubber wastewater, utility wastewaters, miscellaneous wastewaters, and sanitary wastewaters to the Mississippi River (Segment 070301). Segment 070301 is not listed on LDEQ's Final 2006 303(d) List, as impaired, and to date no TMDLs have been established.

A reopener clause will be included in the permit to allow for the establishment of more stringent effluent limitations and requirements as imposed by any future TMDLs.

XVI. Stormwater Pollution Prevention Plan (SWP3) Requirements:

In accordance with LAC 33:IX.2707.1.3 and 4[40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all stormwater discharges from the facility, either through permitted outfalls, through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires implementation of a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, that plan could be incorporated by reference into the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of storm water associated with industrial activity, as defined at LAC 33:IX.2511.B.14 [40 CFR 122.26(b)(14)].

XVII. Permit Reopener Clause

The draft permit has incorporated a requirement for the permittee is to submit Items V and VI of LPDES application Form 2C no later than two years after the commencement of discharge from the proposed facility as per LAC 33:IX.2501.K.5.f. Upon submittal of appropriate Items, LDEQ may choose to modify, or alternatively revoke and reissue this permit to change effluent limitations based on the actual reported flow or production. Additionally, the permit may be reopened to incorporate the results of any total maximum daily load allocation, which may be approved for the receiving water body.